

REMARKS

Applicants hereby offer preliminary amendments to the present application to place the application in better form for allowance.

Applicants have canceled Claims 1-7 in favor of replacement Claims 8-15 to correct certain informalities and to clarify the intended meaning of the claims. Because Claims 8-11 correspond essentially to canceled Claims 1-4 and Claims 13-15 correspond essentially to canceled Claims 5-8, Claims 8-11 and 13-15 remain fully supported in the specification. New Claim 12 incorporates limitations disclosed in the specification, for example, at pages 2 and 3 (e.g., in the formulas) and page 4, line 7, through page 8, line 12, and thus is also fully supported in the specification.

Applicants have amended the specification to move a footnote on page 23 to within the body of Example 2 and to correct several obvious typographical errors that do not alter the scope of their disclosure.

Applicants have amended the Abstract to conform the abstract title to the title at page 1, to capitalize the title, to change the heading "Abstract" to a more customary form, and to correct informalities. A copy of the amended Abstract is separately attached.

In view of the preceding amendments and remarks, allowance of the claims is respectfully requested.

Respectfully submitted,

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ANNOTATED VERSION OF AMENDMENTS

IN THE SPECIFICATION:

The paragraph beginning at page 23, line 8, has been amended as follows:

- a) 0.5 g of (S)-6,6'-dihydroxydiphenyl-2,2'-diyl-bis-(diphenylphosphine), prepared in accordance with WO 93/15090, Example 1, were dissolved under argon in 50 ml of anhydrous and degassed tetrahydrofuran, and a suspension of 0.216 g of sodium hydride in 10 ml of dimethylformamide was added. The mixture was stirred for 60 minutes at room temperature. 4 g of TentaGel® S-bromide [¹] were then added and the mixture was stirred for a further 48 hours at room temperature. TentaGel reactive resins (products from Rapp Polymere GmbH, Tübingen, Germany) are copolymers obtained by stepwise grafting of a crosslinked polystyrene matrix with polyethylene glycol and ethylene oxide according to EP 187 391. They contain freely movable end groups, e.g., in the case of TentaGel S-Br, the group CH₂-CH₂-Br. The solid present was then filtered off, stirred with saturated aqueous ammonium chloride solution and then with 3 x 50 ml of anhydrous methanol and filtered. After the last filtration, the resulting product was dried under reduced pressure.--

The footnote and separator line at the bottom of page 23 have been deleted:

-- [_____]

¹~~-TentaGel reactive resins (products from Rapp Polymere GmbH, Tübingen, Germany), are copolymers obtained by stepwise grafting of a crosslinked polystyrene matrix with polyethylene glycol and ethylene oxide according to EP 187 391. They contain freely movable end groups, e.g. in the case of TentaGel S-Br, the group CH₂-CH₂-Br.]--~~

The paragraph beginning at page 27, line 6, has been amended as follows:

- The separated organic phases were combined, dried (Na₂SO₄) and concentrated on a rotary evaporator. The product was purified by chromatography, (silica gel Merck 60, eluent: ethyl ~~acetate/methanol/water~~ acetate/methanol/water)

75:3:[4,5]1.5). Yield: 3.7g of (S)-[6-cyclohexyloxy-6'-(2-hydroxy-2-methylpropyloxy)biphenyl-2,2'-diyl]bis(diphenylphosphine dioxide) [7] . --

The paragraph beginning at page 28, line 18, has been amended as follows:

- c) 30 g of the modified silica gel, obtained like described in example 10 b, 15.50 ml of tributylamine and 3.85 ml of trichlorosilane were added under argon atmosphere to 100 ml of xylene. The resulting was stirred at reflux temperature for 24 h. After cooling to room temperature the silica gel was filtered [7] (all operations under argon). Then the silica gel was suspended in 100 ml of dichloromethane and to the stirred mixture 30 ml of 4 N sodium hydroxide aqueous solution were added. This mixture was stirred over a period of 1 h at room temperature. Then the silica gel was filtered again and washed with each 100 ml of dichloromethane/methanol (1:1), toluene, isopropanol and finally with dichloromethane. The modified silica gel was dried under a high vacuum at 40°C. yield 29.7 g.
analysis: P-content: 0.32% corresponding to 0.051 mmol diphosphine/g [silicagel] silica gel.--

IN THE CLAIMS:

The heading for the claims at page 31, line 1, has been changed from "**Patent claims**" to --**WHAT IS CLAIMED IS:**--

As explicitly set forth in 37 C.F.R. 1.121(c)(1)(ii), an annotated version does not need to be supplied for an added claim or a canceled claim as long as it is stated that a particular claim has been added or canceled. Here, Claims 1-7 have been canceled and Claims 8-15 have been added.

IN THE ABSTRACT:

The Abstract has been amended at page 35 as follows:

[Process for the preparation of racemic and optically active organic compounds containing hydroxyl groups]

PROCESS FOR THE PREPARATION OF NON-CHIRAL AND OPTICALLY ACTIVE ORGANIC COMPOUNDS CONTAINING HYDROXYL GROUPS

[A-b-s-t-r-a-c-t] ABSTRACT OF THE DISCLOSURE

Non-chiral and, in particular, optically active alcohols are prepared from a carbonyl compound with hydrogen in the presence of a catalyst, a base and optionally a diamine in an advantageous manner [if] by using a catalyst [is-used which] that contains both a support-bonded Ru(II) complex bisphosphine ligand and [also] a diamine ligand.--



PROCESS FOR THE PREPARATION OF NON-CHIRAL AND OPTICALLY
ACTIVE ORGANIC COMPOUNDS CONTAINING HYDROXYL GROUPS

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Non-chiral and, in particular, optically active alcohols are prepared from a carbonyl compound with hydrogen in the presence of a catalyst, a base and optionally a diamine in an advantageous manner by using a catalyst that contains both a support-bonded Ru(II) complex bisphosphine ligand and a diamine ligand.